

THE PRESENT STATUS OF THE ELECTROCARDIOGRAPHIC METHOD IN CLINICAL MEDICINE.*

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A GALVANOMETER suitable for taking clinical electrocardiograms was designed by Einthoven in 1903. Nine years ago (1906) the method was perfected and became available for general use. The first papers dealing with the results of clinical electrocardiography appeared six and seven years ago (1908 and 1909). The first American papers were published in 1910. This report, then, records the results of observations extending over a period of less than ten years.

The electrocardiogram is a record of the electrical discharges from the heart during its activity. Its chief merit consists in the fact that its form remains constant from a time shortly after birth until the alterations due to old age set in. If it changes at all, it does so as the result of alterations within the heart, or in the position of the heart within the body. An alteration from the accustomed form therefore represents a change which must be looked upon as significant.

A normal electrocardiogram in reality does not exist. A group of normal persons in the prime of life yields electrocardiograms which vary only within certain limits. They tend, naturally, to resemble one another, and from this circumstance an ideal form, regarded as the normal electrocardiogram, has been evolved. The constant form of electrocardiograms depends in part on the fact that the method of obtaining records is free from errors due to personal equation. If electrocardiograms are taken with a standard instrument, in a standard way, they may be made anywhere by anybody, and should yield identical curves.

The constancy of an individual electrocardiogram, then, is the basis of the method's importance. Compared with any other form of graphic record of circulatory phenomena, this advantage is manifest. No other one is so simple to read. It can be taken without difficulty at any period of life, and without any discomfort to a patient. It cannot, of course, displace other graphic methods when these record activities other than those given in the electrocardiogram. But where information is required which can be obtained by two methods, the electrocardiographic and another, the electrocardiographic is simpler and more reliable.

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THE OCCURRENCE OF MILIARY TUBERCULOSIS OF THE LIVER IN THE COURSE OF PULMONARY TUBERCULOSIS.

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I HAVE recently made a study of a series of autopsy reports, giving the records of the findings in 131 cases of pulmonary tuberculosis. The object of the investigation was primarily to observe